

that higher ER ($p = 0.019$), lower erbB2 ($p = 0.046$) and higher EGF receptor ($p = 0.033$) were associated with CA125 stable/responsive disease.

Conclusion: These results imply that letrozole treatment can produce disease stabilisation and CA125 responses which in turn are linked to higher levels of ER expression. These data suggest the presence of an "endocrine-sensitive" group which could be targeted in future studies.

1021

ORAL

Ovarian cancer: comparison of F-18-FDG-PET imaging technique versus computed tomography scan and serum CA-125 level for diagnosis of recurrent disease

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Purpose: To evaluate the sensitivity of whole body FDG-Positron Emission Tomography study in detecting recurrence of ovarian cancer.

Methods: 18 consecutive stage III and IV ovarian cancer patients (pts) previously treated with surgery and chemotherapy with suspicion of relapse, were evaluated with FDG-PET imaging scan. Recurrence disease was suspected by abnormal CA 125 levels and/or by CT scan. The images corrected by attenuation of thoracic, abdominal and pelvic regions were obtained 45 minutes after the iv injection of 370 MBq of F-18-FDG with an ECAT EXACT HR+ scanner. Ovarian cancer recurrence was confirmed by histopathologic analysis (9 pts) or follow up (9 pts). The sensitivity value of the functional imaging technique has been compared with the CA 125 levels and the CT scans.

Results: The sensitivity for CT scan, CA 125 and F-18-FDG-PET were 44%(8/18 pts), 83%(15/18 pts) and 100%(18/18 pts) respectively. PET has successfully detected recurrent disease in 3 pts with normal CA 125 levels and in 10 pts with non suspicious CT scan. There was significant difference between PET and CT in regard to sensitivity (The p value for the McNemar test was < 0.01).

Conclusion: In this small series of 18 pts with suspicion of relapsed ovarian cancer, PET has proven to have more sensitivity than CT scan in detecting recurrent disease. Updated results with more pts will be presented.

1022

ORAL

In vivo induction of HPV 16 specific cytotoxic CTL and T-helper immunity in patients with advanced cervical cancer using autologous dendritic cells (dc) pulsed with tumour lysate as a potential anti-cancer vaccine

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The feasibility, and safety of inducing specific class 1 and 2 specific CTL response to HPV E6 and E7 antigens using autologous dendritic cells primed with HPV +ve tumour lysate as an anti cancer vaccine has been tested in a phase IB clinical trial.

Patients and Methods: 9 patients with advanced cervical cancer (8 recurrent with distant metastases) have been vaccinated. Monocyte derived DCs were cultured from 10 9 PBMC obtained at leucaphoresis using GM-CSF and IL 4 for 7 days. CD11a + CD14 - immature DC were pulsed with sonicated HPV +ve tumour lysate (5 autologous and 4 allogeneic lysate) and the frozen in aliquots for 6 weekly subcutaneous vaccinations of 107 DC. Immunological endpoints were DTH skin reactions to recall antigens and lysate, tetramer CTL response and ELISPOT CTL and T-helper response in 5 evaluable patients. Tumour response was assessed clinically and radiologically.

Results: Toxicity was mild with occasional fever and malaise but one patient developed a capillary leak syndrome which was successfully treated with steroids. Only 2/9 patients reacted to recall antigens on skin testing. Specific HPV specific CTL response was demonstrated in peripheral blood in 2/3 evaluable (HPV16 + HLA 002*) patients after vaccination. In these patients the frequency of HPV16E7 [11-20] rose to 2.2% as detected by class1 tetramers and the IFN gamma ELISPOT assay -revealed a specific - response to 4 HPV 16 E6 and 7 derived CTL epitopes, 1 week and 2 months respectively after vaccination. In 1/4 evaluable HPV 16 + patients a specific T-helper response was also observed. T cell immunity as detected

by ELISPOT correlated with the DTH response to tumour lysate and these patients followed a favourable clinical outcome (NED of disease 18mo + after resection of lung metastasis, stable disease for 3+ mo after progression).

Conclusion: It is feasible to induce in vivo HPV specific class 1 and 2 T cell specific response in cervical cancer patients even with advanced disease using autologous DC primed with tumour lysate. However the optimum strategy may require IL 12 producing mature DC which is being currently investigated.

1023

ORAL

Survival after relapse in patients with endometrial cancer: results from a randomized trial

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Purpose: To determine the rates of local control and survival after relapse in patients with stage I endometrial cancer treated in the multicenter randomized PORTEC-trial with surgery and pelvic radiotherapy (RT) or surgery alone.

Materials & Methods: The PORTEC trial included patients with FIGO stages IC grade 1 or 2 and IB grade 2 or 3 endometrial cancer. In all cases an abdominal hysterectomy was performed, without lymphadenectomy. After surgery, patients were randomized to receive pelvic RT (46 Gy), or no further treatment. 715 patients were randomized.

Results: The analysis was done by intention-to-treat. 714 patients could be evaluated. At a median follow-up duration of 60 months, 5-year actuarial locoregional recurrence rates were 4% in the RT group, and 14% in the control group ($p < 0.001$). The 5-year overall survival rates were 81% (RT group) and 85% (control group, $p = 0.31$). The majority of the locoregional relapses were located in the vagina, mostly in the vaginal vault. At 5 years, 7 vaginal and 5 pelvic recurrences were recorded in the RT group, and 32 vaginal and 13 pelvic recurrences in the control group. Five-year rates of vaginal, pelvic and distant failures as first failure were 2%, 1.4% and 6.3% in the RT group, and 9%, 4% and 3.2% in the control group. Five-year rates of distant metastases were 8.4% in the RT group and 6.1% in the control group. Most patients with an isolated locoregional relapse could be treated with curative intent, usually with external RT and brachytherapy, and/or surgery in some. A complete remission was obtained in 85%. At the time of the analysis, only 8 out of the 52 patients with a locoregional relapse had died due to the relapse, while 39 of the 48 patients with distant metastases had died from the metastases. Patients with a vaginal recurrence had 2- and 3-year post-relapse survival rates of 79% and 71%, in contrast to 22% and 9% 2- and 3-year survival rates after pelvic relapse and/or distant metastases ($p < 0.001$). The 3-year survival after first relapse was significantly better for patients in the control group (51%) than for patients in the RT group (19%, $p = 0.02$).

Conclusion: Pelvic RT in stage I endometrial cancer reduces the risk of locoregional relapse, but without a survival benefit. Treatment for vaginal relapse is often successful in patients not previously irradiated, leading to a significantly better post-relapse survival for patients in the control group. Updated results will be presented.

Cell biology/Genetics II

1024

ORAL

A microcell hybrid based approach identifies human chromosome 3p genes that are silenced following tumor growth, at four distinct regions

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Purpose: We had previously shown (Imreh et al., 1994; 1997) that inoculation of human chr3/A9 mouse fibrosarcoma microcell hybrids (MCHs) into SCID mice was followed by the regular elimination of some 3p regions. Using this approach, referred to as the elimination test (Et), we have defined a